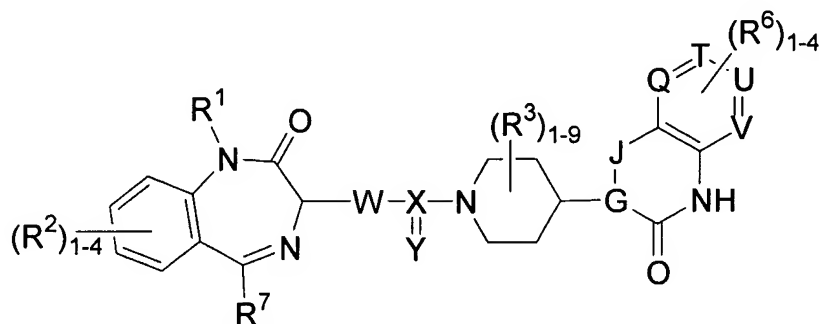


Listing of the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A ~~compounds~~ compound of formula I:



I

wherein:

R¹ is selected from:

- 1) H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, and heterocycle, unsubstituted or substituted with one or more substituents independently selected from:
 - a) C₁-C₆ alkyl,
 - b) C₃-C₆ cycloalkyl,
 - c) aryl, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R⁴,
 - d) heteroaryl, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R⁴,
 - e) heterocycle, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R⁴,
 - f) (F)_pC₁₋₃ alkyl,
 - g) halogen,
 - h) OR⁴,
 - i) O(CH₂)_s OR⁴,

- j) CO_2R^4 .
- k) $(\text{CO})\text{NR}^{10}\text{R}^{11}$.
- l) $\text{O}(\text{CO})\text{NR}^{10}\text{R}^{11}$.
- m) $\text{N}(\text{R}^4)(\text{CO})\text{NR}^{10}\text{R}^{11}$.
- n) $\text{N}(\text{R}^{10})(\text{CO})\text{R}^{11}$.
- o) $\text{N}(\text{R}^{10})(\text{CO})\text{OR}^{11}$.
- p) $\text{SO}_2\text{NR}^{10}\text{R}^{11}$.
- q) $\text{N}(\text{R}^{10})\text{SO}_2\text{R}^{11}$.
- r) $\text{S}(\text{O})_m\text{R}^{10}$,
- s) CN ,
- t) $\text{NR}^{10}\text{R}^{11}$,
- u) $\text{N}(\text{R}^{10})(\text{CO})\text{NR}^4\text{R}^{11}$, and
- v) $\text{O}(\text{CO})\text{R}^4$; and

2) aryl or heteroaryl, unsubstituted or substituted with one or more substituents independently selected from:

- a) C_{1-6} alkyl,
- b) C_{3-6} cycloalkyl,
- c) aryl, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R^4 ,
- d) heteroaryl, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R^4 ,
- e) heterocycle, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R^4 ,
- f) $(\text{F})_p\text{C}_{1-3}$ alkyl,
- g) halogen,
- h) OR^4 .
- i) $\text{O}(\text{CH}_2)_s\text{OR}^4$,
- j) CO_2R^4 .
- k) $(\text{CO})\text{NR}^{10}\text{R}^{11}$.
- l) $\text{O}(\text{CO})\text{NR}^{10}\text{R}^{11}$.
- m) $\text{N}(\text{R}^4)(\text{CO})\text{NR}^{10}\text{R}^{11}$.
- n) $\text{N}(\text{R}^{10})(\text{CO})\text{R}^{11}$.
- o) $\text{N}(\text{R}^{10})(\text{CO})\text{OR}^{11}$.

- p) $\text{SO}_2\text{NR}^{10}\text{R}^{11}$,
- q) $\text{N}(\text{R}^{10})\text{SO}_2\text{R}^{11}$,
- r) $\text{S}(\text{O})_m\text{R}^{10}$,
- s) CN ,
- t) $\text{NR}^{10}\text{R}^{11}$,
- u) $\text{N}(\text{R}^{10})(\text{CO})\text{NR}^4\text{R}^{11}$, and
- v) $\text{O}(\text{CO})\text{R}^4$; and

R^2 is independently selected from H and:

- 1) C_{1-6} alkyl,
- 2) C_{3-6} cycloalkyl,
- 3) aryl, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R^4 ,
- 4) heteroaryl, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R^4 ,
- 5) heterocycle, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R^4 ,
- 6) $(\text{F})_p\text{C}_{1-3}$ alkyl,
- 7) halogen,
- 8) OR^4 ,
- 9) $\text{O}(\text{CH}_2)_5\text{OR}^4$,
- 10) CO_2R^4 ,
- 11) $(\text{CO})\text{NR}^{10}\text{R}^{11}$,
- 12) $\text{O}(\text{CO})\text{NR}^{10}\text{R}^{11}$,
- 13) $\text{N}(\text{R}^4)(\text{CO})\text{NR}^{10}\text{R}^{11}$,
- 14) $\text{N}(\text{R}^{10})(\text{CO})\text{R}^{11}$,
- 15) $\text{N}(\text{R}^{10})(\text{CO})\text{OR}^{11}$,
- 16) $\text{SO}_2\text{NR}^{10}\text{R}^{11}$,
- 17) $\text{N}(\text{R}^{10})\text{SO}_2\text{R}^{11}$,
- 18) $\text{S}(\text{O})_m\text{R}^{10}$,
- 19) CN ,
- 20) $\text{NR}^{10}\text{R}^{11}$,
- 21) $\text{N}(\text{R}^{10})(\text{CO})\text{NR}^4\text{R}^{11}$, and

22) $O(CO)R^4$;

R^7 is selected from:

- 1) H, C_0 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 -6 cycloalkyl and heterocycle, unsubstituted or substituted with one or more substituents independently selected from:
 - a) C_1 -6 alkyl,
 - b) C_3 -6 cycloalkyl,
 - c) aryl, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R^4 ,
 - d) heteroaryl, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R^4 ,
 - e) heterocycle, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R^4 ,
 - f) $(F)_pC_{1-3}$ alkyl,
 - g) halogen,
 - h) OR^4 ,
 - i) $O(CH_2)_sOR^4$,
 - j) CO_2R^4 ,
 - k) $(CO)NR^{10}R^{11}$,
 - l) $O(CO)NR^{10}R^{11}$,
 - m) $N(R^4)(CO)NR^{10}R^{11}$,
 - n) $N(R^{10})(CO)R^{11}$,
 - o) $N(R^{10})(CO)OR^{11}$,
 - p) $SO_2NR^{10}R^{11}$,
 - q) $N(R^{10})SO_2R^{11}$,
 - r) $S(O)_mR^{10}$,
 - s) CN,
 - t) $NR^{10}R^{11}$,
 - u) $N(R^{10})(CO)NR^4R^{11}$,
 - v) $O(CO)R^4$; and
- 2) aryl or heteroaryl, unsubstituted or substituted with one or more substituents independently selected from:

- a) C₁₋₆ alkyl,
- b) C₃₋₆ cycloalkyl,
- c) aryl, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R⁴,
- d) heteroaryl, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R⁴,
- e) heterocycle, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R⁴,
- f) (F)_pC₁₋₃ alkyl,
- g) halogen,
- h) OR⁴,
- i) O(CH₂)_sOR⁴,
- j) CO₂R⁴,
- k) (CO)NR¹⁰R¹¹,
- l) O(CO)NR¹⁰R¹¹,
- m) N(R⁴)(CO)NR¹⁰R¹¹,
- n) N(R¹⁰)(CO)R¹¹,
- o) N(R¹⁰)(CO)OR¹¹,
- p) SO₂NR¹⁰R¹¹,
- q) N(R¹⁰)SO₂R¹¹,
- r) S(O)_mR¹⁰,
- s) CN,
- t) NR¹⁰R¹¹,
- u) N(R¹⁰)(CO)NR⁴R¹¹, and
- v) O(CO)R⁴;

R⁴ is selected from: H, C₁₋₆ alkyl, (F)_pC₁₋₆ alkyl, C₃₋₆ cycloalkyl, aryl, heteroaryl and benzyl, unsubstituted or substituted with halogen, hydroxy or C₁-C₆ alkoxy;

R⁵ is independently selected from H, substituted or unsubstituted C₁-C₆ alkyl, C₃₋₆ cycloalkyl, aryl, heteroaryl, OR⁴, N(R⁴)₂, CO₂R⁴ and (F)_pC₁₋₆ alkyl;

W is O, NR⁴ or C(R⁴)₂;

X is C or S;

Y is O, (R⁴)₂, NCN, NSO₂CH₃ or NCONH₂, or Y is O₂ when X is S;

R³ is independently selected from H, substituted or unsubstituted C₁-C₃ alkyl, CN and CO₂R⁴;

R⁶ is independently selected from H and:

- a) C₁-6 alkyl,
- b) C₃-6 cycloalkyl,
- c) aryl, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R⁴,
- d) heteroaryl, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R⁴,
- e) heterocycle, unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R⁴,
- f) (F)_pC₁₋₃ alkyl,
- g) halogen,
- h) OR⁴.
- i) O(CH₂)_sOR⁴,
- j) CO₂R⁴.
- k) (CO)NR¹⁰R¹¹.
- l) O(CO)NR¹⁰R¹¹.
- m) N(R⁴)(CO)NR¹⁰R¹¹.
- n) N(R¹⁰)(CO)R¹¹.
- o) N(R¹⁰)(CO)OR¹¹.
- p) SO₂NR¹⁰R¹¹.
- q) N(R¹⁰)SO₂R¹¹.
- r) S(O)_mR¹⁰,
- s) CN,
- t) NR¹⁰R¹¹,
- u) N(R¹⁰)(CO)NR⁴R¹¹, and
- v) O(CO)R⁴;

R¹⁰ and R¹¹ are independently selected from: H, C₁₋₆ alkyl, (F)_pC₁₋₆ alkyl, C₃₋₆ cycloalkyl, aryl, heteroaryl and benzyl, unsubstituted or substituted with halogen, hydroxy or C₁₋₆ alkoxy, where R¹⁰ and R¹¹ may be joined together to form a ring selected from: azetidiny, pyrrolidinyl, piperidinyl, piperazinyl and morpholinyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from R⁴;

G-J is selected from: N, N-C(R⁵)₂, C=C(R⁵), C=N; C(R⁵), C(R⁵)-C(R⁵)₂, C(R⁵)-C(R⁵)₂-C(R⁵)₂, C=C(R⁵)-C(R⁵)₂, C(R⁵)-C(R⁵)=C(R⁵), C(R⁵)-C(R⁵)₂-N(R⁵), C=C(R⁵)-N(R⁵), C(R⁵)-C(R⁵)=N, C(R⁵)-N(R⁵)-C(R⁵)₂, C=N-C(R⁵)₂, C(R⁵)-N=C(R⁵), C(R⁵)-N(R⁵)-N(R⁵), C=N-N(R⁵), N-C(R⁵)₂-C(R⁵)₂, N-C(R⁵)=C(R⁵), N-C(R⁵)₂-N(R⁵), N-C(R⁵)=N, N-N(R⁵)-C(R⁵)₂ and N-N=C(R⁵);

Q, T, U and V are each independently a carbon atom or a nitrogen atom wherein at least one but no more than three of Q, T, U and V are nitrogen atoms, and wherein when any of Q, T, U, or V is a carbon atom it is unsubstituted or substituted where the substituents are independently selected from R⁶;

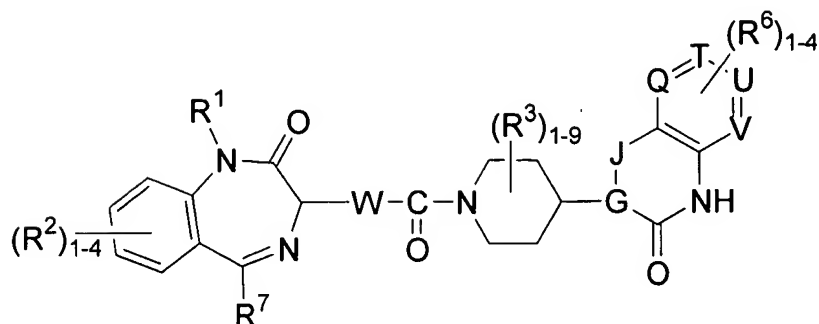
p is 0 to 2q+1, for a substituent with q carbons;
m is 0, 1 or 2;
n is 0 or 1;
s is 1, 2 or 3;

"heterocyclic" is a stable 5- to 7- membered monocyclic- or stable 8- to 11- membered bicyclic heterocyclic ring system, which is either saturated or unsaturated, and which consists of carbon atoms and from one to four heteroatoms selected from the group consisting of N, O and S, and wherein the nitrogen and sulfur heteroatoms may optionally be oxidized, and the nitrogen heteroatom may optionally be quarternized, and including any bicyclic group in which any of the above-defined heterocyclic rings is fused to a benzene ring;

"heteroaryl" is a stable 5- to 7- membered monocyclic stable 9- to 10-membered fused bicyclic heterocyclic ring system which contains an aromatic ring, any ring of which may be saturated;

and or a pharmaceutically acceptable salts and salt or individual diastereomers diastereomer thereof.

2. (Currently Amended) The compound of claim 1 of the formula Ia:



and or a pharmaceutically acceptable salts and salt or individual diastereomers diastereomer thereof.

3. (Currently Amended) The compound of claim 2, wherein R^7 is phenyl, unsubstituted or substituted with one or substituents independently selected from:

- a) C_{1-6} alkyl,
- b) OH,
- c) OR^5 ,
- d) halogen,
- e) CO_2R^4 ,
- f) $S(O)_mR^5$,
- g) $N(R^4)_2$, and
- j) CN,

and or a pharmaceutically acceptable salts and salt or individual diastereomers diastereomer thereof.

4. (Currently Amended) The compound of claim 2, wherein R^7 is heteroaryl, unsubstituted or substituted with one or substituents independently selected from:

- a) C_{1-6} alkyl,
- b) OH,
- c) OR^5 ,
- d) halogen,
- e) CO_2R^4 ,
- f) $S(O)_mR^5$,

- g) $N(R^4)_2$, and
- j) CN,

and or a pharmaceutically acceptable ~~salts and~~ salt or individual ~~diastereomers~~ diastereomer thereof.

5. (Currently Amended) The compound of claim 2, wherein R^7 is selected from H and C₁-C₆ alkyl, C₁-C₆ alkenyl, C₁-C₆ alkynyl, C₃-C₆ cycloalkyl, unsubstituted or substituted with one or substituents independently selected from:

- a) C₁-6 alkyl,
- b) C₁-6 alkoxy,
- c) fluorine,
- d) HO,
- e) OR^5 ,
- f) CO_2R^4 ,
- g) $CON(R^4)_2$,
- h) $S(O)_mR^5$, and
- i) $N(R^4)_2$; and

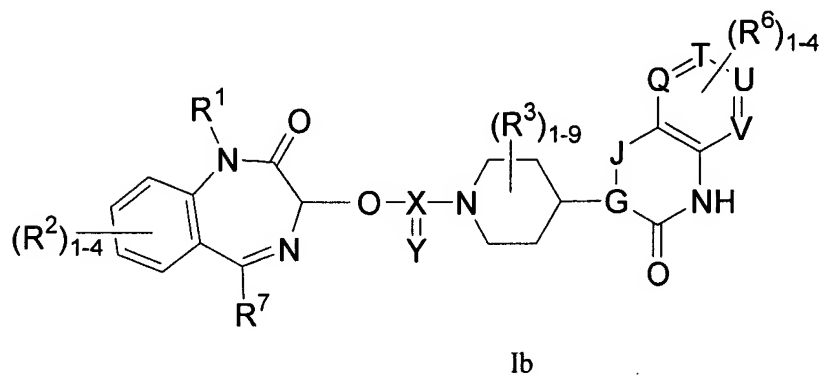
and or a pharmaceutically acceptable ~~salts and~~ salt or individual ~~diastereomers~~ diastereomer thereof.

6. (Currently Amended) The compound of claim 2, wherein R^7 is heterocycle, unsubstituted or substituted with one or substituents independently selected from:

- a) C₁-6 alkyl,
- b) C₁-6 alkoxy,
- c) fluorine,
- d) HO,
- e) OR^5 ,
- f) CO_2R^4 ,
- g) $CON(R^4)_2$,
- h) $S(O)_mR^5$, and
- i) $N(R^4)_2$; and

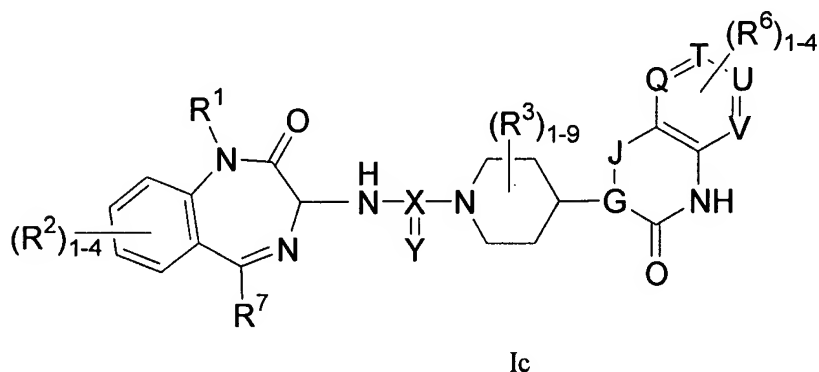
and or a pharmaceutically acceptable ~~salts and~~ salt or individual ~~diastereomers~~ diastereomer thereof.

7. (Currently Amended) The compound of claim 1 of the formula Ib:



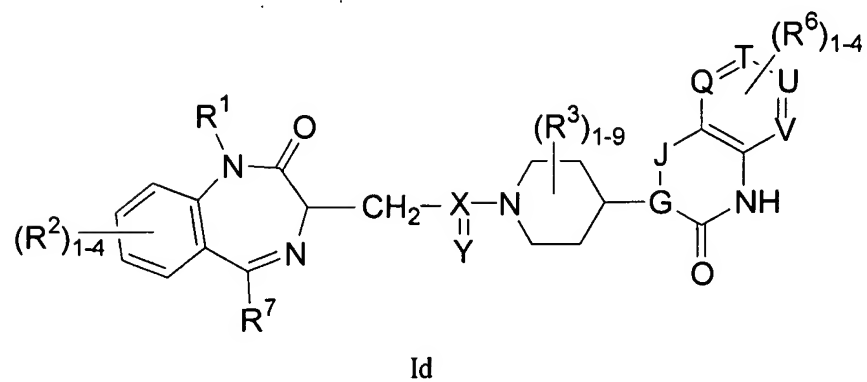
and or a pharmaceutically acceptable ~~salts and~~ salt or individual ~~diastereomers~~ diastereomer thereof.

8. (Currently Amended) The compound of claim 1 of the formula Ic:



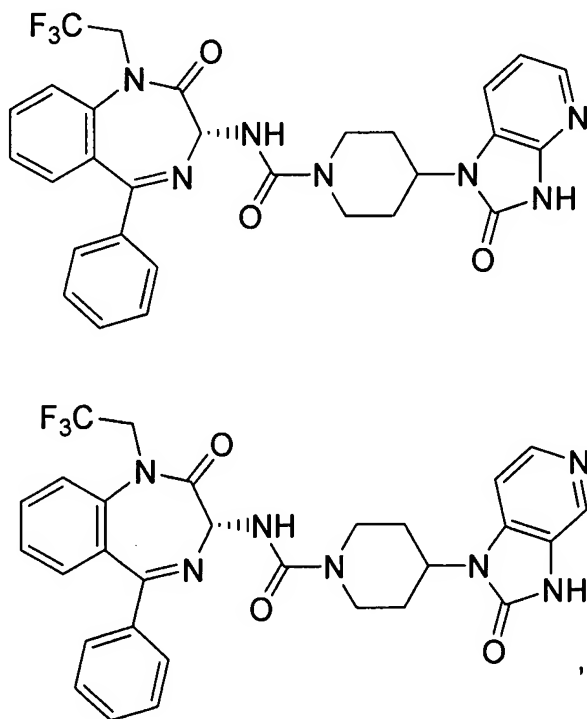
and or a pharmaceutically acceptable ~~salts and~~ salt or individual ~~diastereomers~~ diastereomer thereof.

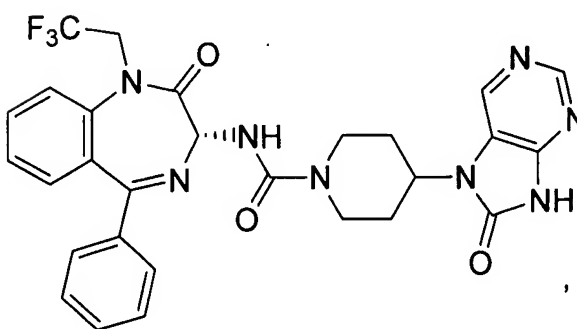
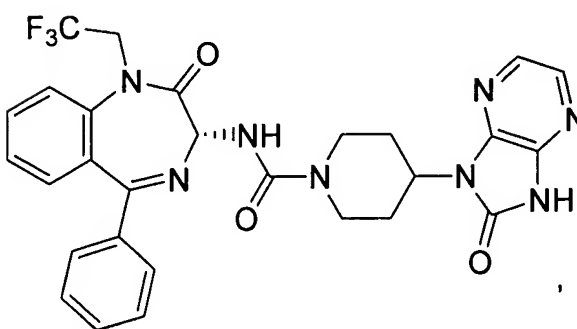
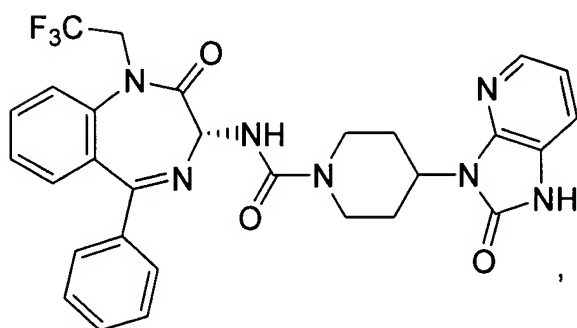
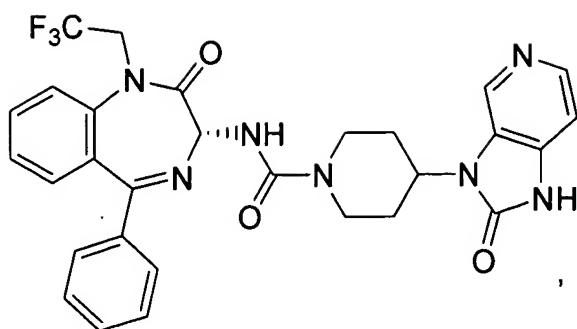
9. (Currently Amended) The compound of claim 1 of the formula Id:

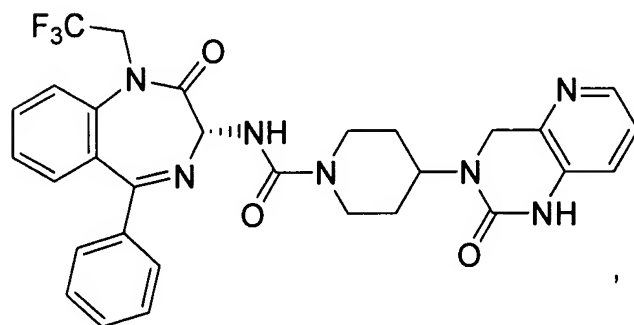
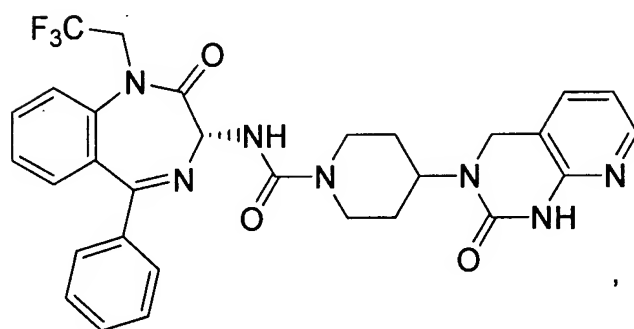
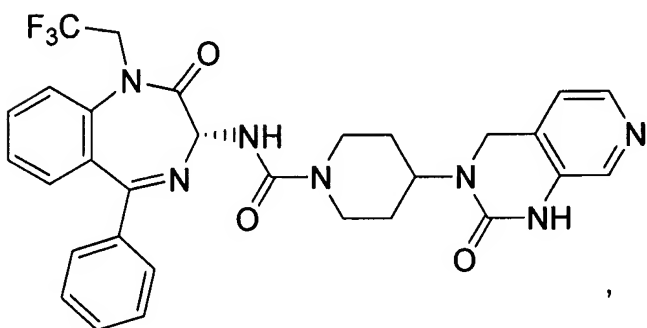
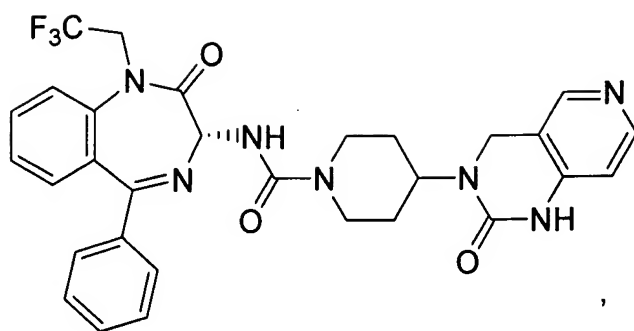


and or a pharmaceutically acceptable salts and salt or individual ~~diastereomers~~ diastereomer thereof.

10. (Currently Amended) A compound selected from:







and or a pharmaceutically acceptable salts and salt or individual diastereomers diastereomer thereof.

11. (Original) A pharmaceutical composition which comprises an inert carrier and the compound of Claim 1.

12. (Canceled)

13. (Currently Amended) A method for treating, ~~controlling, ameliorating or reducing the risk of~~ headache, migraine or cluster headache in a mammalian patient in need of such which comprises administering to the patient a therapeutically effective amount of the compound of Claim 1.

14 -57. (Canceled)

58. (New) The method of claim 13 wherein the headache is a migraine headache or cluster headache.